

RE-COLLECTION AND TENTATIVE HOST RECORD FOR *HYGIA*  
(*AUSTRALOCOLPURA*) *SANDARACINE* BRAILOVSKY  
(HEMIPTERA: COREIDAE: COLPURINI)

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**Abstract**

A second collection at the original type locality of the rare Australian colpurine coreid *Hygia* (*Australocolpura*) *sandaracine* Brailovsky is recorded, with an apparent feeding record on the tree fern *Dicksonia antarctica* Labill. (Dicksoniaceae).

**Introduction**

The coreid tribe Colpurini contains 21 species in Australia (Brailovsky 2001, Cassis and Gross 2002). Little is recorded of their biology although Brailovsky (1993) described them as 'typically species of the rainforest'. Collection records indicate that most colpurines are taken on the ground and among leaf litter. The only references to their food plants in Australia are those by Kumar (1966), who recorded *Pachycolpura manca* Breddin on *Urtica*, *Coreopsis*, tomato and pumpkin, and Steinbauer and Clarke (1996), who noted a possible association between *Acantholybas kirkaldyi* Bergroth and *Eucalyptus*. In New Zealand, the introduced Australian species *Acantholybas brunneus* (Breddin) feeds on a wide variety of plants, summarised by Steinbauer and Clarke (1996). Extralimital host records on cacao and taro in New Guinea for the Australian species *Agathyrna praezellens* Stål were summarised by Cassis and Gross (2002).

*Hygia* (*Australocolpura*) *sandaracine* Brailovsky was described from a single collection of two specimens in New England National Park, northern New South Wales (Brailovsky 1993). This paper documents a re-collection of the species and a possible food plant.

**Observations**

On January 1, 2004, a group of 10-15 individuals (including 3 pairs *in cop.*) and 5-10 nymphs (of early to late instar) of *H. sandaracine* were observed on fronds of the soft tree fern *Dicksonia antarctica* Labill. (Dicksoniaceae), on the Lyrebird Walk in New England National Park. At this point the track passes through 'myrtle forest' (temperate rainforest with *Nothofagus cunninghamii* (Hook.) Oerstr.) at about 1300-1400 m altitude at the base of the eastern escarpment cliffs. A few individuals were observed with their rostra touching the central leader of the frond, apparently feeding. Five males and two females (Fig. 1) were collected for identification and have been deposited in the Australian National Insect Collection (ANIC), Canberra.

When handled, they released a pungent, ester-smelling odour, similar to that of other coreids (Steinbauer and Davies 1995).

### Discussion

Records of heteropterans feeding on ferns are rare. The only member of the Pentatomomorpha recorded in Australia on ferns, in the summary by Cassis and Gross (2002), is the highly polyphagous rhyparochromid *Remaudiereana inornata* (Walker). Only gymnosperms and angiosperms were listed for world Coreidae (including only one Colpurini) by Schaefer and Mitchell (1983). No lower vascular plants were listed for Coreidae in a review of economically important species (Mitchell 2000). Schaefer (1965) regarded the Colpurini as 'primitive' within the Coreidae. If *H. sandaracine* can be shown to be monophagous on ferns it would support this view. However, this may be unlikely in view of the wide range of plants used by *Acantholybas brunneus* in New Zealand (see above). Clearly, more information on the host plants of native Australian Coreidae is required.



Fig. 1. *Hygia (Australocolpura) sandaracine* Brailovsky. (A-B) dorsal and lateral views of adult female, (C-D) dorsal and lateral views of adult male. Scale bar = 5 mm.

## Acknowledgements

I thank Ben Boyd (ANIC, Canberra) for Fig. 1, Tony Prior (NSW National Parks and Wildlife Service, Dorrigo) for assistance in determining the identity of the host plant, Tom Weir (ANIC, Canberra) for confirmation of the initial species determination and an anonymous reviewer for beneficial revisions to the text.

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